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School Food Service Management Manual



1977

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July 1977

For sale by the Superintendent of Documents,
U.S. Government Printing Office,
Washington, D.C. 20402

Stock No. 001-000-03697-1

PREFACE

Child nutrition programs are equally important to both large and small schools. However, the problems confronting private schools and small public schools when managing these programs may be very different from those of large public schools. The U.S. Department of Agriculture is continually working with State agencies, local school authorities, private schools, and communities to improve the programs. This handbook was written specifically for school food service supervisors and managers in private schools and small public schools. It will serve as a guide to them in establishing and improving the child nutrition programs.

School food service is made up of three sections. First, there are the technical aspects of operation. These include such things as menu control, preparation of the food, and actual service to the customers. Second are the administrative details, which include the process of providing meals at free or reduced prices. Third is the financial management part of school food service. It provides for accountability.

This manual is designed principally for school food service supervisors and managers in schools preparing meals on the school premises. It cannot give all the answers. But it is intended to develop an awareness of what a good school food service is, how to achieve a good school food service, and where to get help in areas that need additional input. The manual is not intended to conflict with State agency policies.

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1 CHILD NUTRITION PROGRAMS

The National School Lunch Program and the School Breakfast Program help schools provide wholesome, appetizing meals to students every school day. These programs, along with the Special Milk Program, make an important contribution to the nutrition of children while helping expand markets for farm products. Child nutrition programs also provide teaching opportunities for building good dietary habits among America's youth.

The National School Lunch Program, the School Breakfast Program, and the Special Milk Program are essentially community efforts. These programs are operated through the cooperation of the U.S. Department of Agriculture, State Departments of Education and local school authorities. The real success of the programs, however, depends on the interest and attitude in the local school and the community it serves.

objective was to "safeguard the health and well-being of the Nation's children and to encourage the domestic consumption of nutritious agricultural commodities and other food." The basic goals have not been altered over the years. USDA is committed to the task of providing food programs for all elementary and secondary school students and eliminating hunger and malnutrition from the American scene.

The Child Nutrition Act of 1966 authorized a pilot School Breakfast Program. Nutritious breakfasts were served in schools that had many needy students or students who traveled long distances to school. More recent amendments have given the School Breakfast Program expanded funding levels to allow the program to be available to all students, not just the needy.

Program Administration

USDA's Food and Nutrition Service (FNS) administers the National School Lunch Program, the School Breakfast Program, and the Special Milk Program at the Federal level. Programs in public schools and in most private schools are administered directly by the State Departments of Education, who make agreements with the local school officials. In States that have laws prohibiting the State educational agencies from working with private schools, the FNS Regional Offices administer the program directly.

Benefits of Child Feeding Programs

The National School Lunch Program, School Breakfast Program, and Special Milk Program have proven beneficial to students, parents, teachers, and the community. Since hungry

Brief History

Organized school feeding in the United States dates back to the mid-1800's, but Federal assistance to school food service operations did not begin until the early 1930's.

The economic depression of the Thirties had a great effect on the growth of school lunch programs in this country. The depression brought about widespread unemployment, and one result of this was that Federal funds were used to employ women needing jobs to prepare and serve meals in schools. Also during this time,

Congress enacted legislation which authorized the Secretary of Agriculture to purchase surplus farm commodities for distribution to needy families and to school food service programs. With the start of World War II, surplus farm products became a thing of the past. Therefore, in 1943 USDA began to give cash assistance to the schools.

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Benefits of Child Feeding Programs

The National School Lunch Program, School Breakfast Program, and Special Milk Program have proven beneficial to students, parents, teachers, and the community. Since hungry

children have difficulty learning and frequently become disciplinary problems, the school food service programs are an important part of the total educational process.

How are the school feeding programs beneficial?

- They make nutritious, low-cost meals available to *all* students in the school.
- Students have the opportunity to learn and practice good eating habits and manners.
- The well-balanced meals help develop strong bodies and healthy minds.
- The programs provide an educational laboratory for learning about nutrition and good health.
- Students that cannot afford to buy their meals can still have nutritious meals free or at reduced prices.

The programs are a positive asset to local communities and to the Nation. What is more important than having strong, healthy school children today who will be tomorrow's strong, healthy citizens?

USDA Requirements

In order to receive Federal assistance, schools participating in the National School Lunch Program and the School Breakfast Program must agree to:

- Operate a nonprofit food service program for all students.
- Serve meals which meet the minimum meal requirements prescribed by USDA.
- Provide meals free or at a reduced price to

needy students who cannot afford to pay the full price. Such students must not be identified or discriminated against in any way.

- Maintain full and accurate records on the food service operation.
- Operate the food service for all students without regard to race, creed, color, or national origin.

Assistance Available from USDA

USDA provides cash reimbursement and commodity assistance for schools participating in the National School Lunch Program, the School Breakfast Program, and the Special Milk Program. Cash reimbursements are paid according to the number of meals served to students meeting specified meal requirements. The kinds and amounts of USDA donated commodities vary depending on fluctuations in agricultural production and marketing conditions.

USDA, in administering the child nutrition programs at the Federal level, provides technical assistance to FNS Regional Offices and State agencies who, in turn, assist local school food authorities in the operation of lunch, breakfast, and milk programs.

Nonfood assistance funds are available to participating schools for the purchase or rental of food service equipment. To be eligible for nonfood assistance, schools must serve a high percentage of students from low-income areas and have no equipment or inadequate equipment for the food service operation. State agencies and FNS Regional Offices can provide more information on all forms of USDA assistance.

2 ADMINISTRATIVE POLICIES AND PROCEDURES

School food service is an important part of a school's planned education program. The success or failure of the program is dependent on the attitudes and efforts not only of the food service manager but also the school administrator, teachers, parents, and students.

The Administrator

The administrator's role is a key to the success of a school food service program. His or her responsibilities, whether beginning or continuing a program, are:

- Learn about the Federal and State program requirements and fully understand these requirements.
- Develop policies and procedures regarding the style of preparation and service of lunches, scheduling and supervision of lunch periods, lunch charges, and personnel policies that affect food service personnel.
- Implement free and reduced-price meal policy requirements.
- Integrate nutrition education into the total education curriculum.
- Promote the program as part of the overall education process.
- Demonstrate interest in and support of the programs.

In all of these areas, you, as school food service manager, can and should have influence and input. You should be working with the administrator as a team. You are the food service expert within your school and should contribute to the decisions that will affect the food service operation.

Your administrator needs sound background information when making decisions affecting any part of the school. It is important for you to help keep him up-to-date with what is happening in the food service program. There

is no substitute for good communication with the administrator.

All policies and procedures affecting the food service and dining room should be in writing and should be coordinated with the administrator. It will be helpful if you have the policies and procedures accessible for easy reference. Having them accessible will also help avoid misunderstandings and confusion should someone need to take over in your absence.

Free and Reduced-Price Policy

All schools participating in the National School Lunch and the School Breakfast Programs are required to provide meals free or at a reduced price to students unable to pay the full price of the meal. Each school participating in the child nutrition programs is required to annually develop a free and reduced-price meal policy which details how such meals will be made available to eligible students.

A student's eligibility for free or reduced-price meals is determined by local school officials in accordance with the school's free and reduced-price meal policy. Eligibility is based on family income and family size. Income levels established by the Secretary of Agriculture are used as minimum guidelines to determine eligibility.

A school's "free or reduced-price policy" will include a system for distributing and collecting tickets and money in which students eligible to receive free or reduced-price meals will not be singled out or openly identified in any way. Any collection procedure used should have a

built-in accounting system to record the number of paid, reduced-price and free meals and free or paid milk served daily.

SScheduling

In scheduling lunch periods, you should work with the administrator to consider the number of students eating in the dining room and the space available. Your discussion should include the type of food service offered, the number of choices available, facilities, and how all this will affect scheduling. It is very important to allow students enough time to eat and to leave the dining area clean and orderly.

REMEMBER: The more pleasant you can make the lunch period, the more customers you will have.

DDining Room Supervision

Discipline in the dining room should compare to that in the school's halls and on the playgrounds. Students need not have extremely strict supervision, but a certain amount of discipline is necessary so that those in the dining room can have a relaxed, pleasant meal. You and your administrator should have a clear understanding as to who will take responsibility for lunch room supervision.

3 PERSONNEL

The success of any school food service program depends largely on its personnel. Well-defined personnel policies provide guidelines for an efficient operation and give stability to the program and security to the employees.

Recruiting and retaining qualified personnel are the most difficult problems facing any business today. School food service is "big business" and subject to the same personnel problems confronting other segments of the business world.

It is important that every employee be carefully selected for each position. Employees need an understanding of their responsibilities, thorough training, and detailed instructions to do a satisfactory job. Motivation will be increased if the employee understands the purpose of the programs and the tasks necessary to achieve that purpose.

Staff Responsibilities

The school food service staff should be under direct supervision of the manager.

Responsibilities of the food service employees generally include:

- Preparation and service of food according to the written menu of the day, using acceptable food service techniques to give the highest quality food possible.
- Proper storage of foods to meet sanitation requirements.
- Cleaning and sanitizing all equipment, serving pieces, dishes, utensils and cooking items.
- Cleaning and sanitizing the preparation, service, storage, and dining areas.

Duties of each staff member should be scheduled ahead of time by the manager. In assigning tasks, consider the abilities and knowledge of each individual. It may be

necessary to plan for training or close supervision of employees being assigned new tasks.

Staffing

Depending on the way your school system operates, one of the major responsibilities that you share with your administrator may be the determination of staffing for the food service operation. Simply put, staffing is planning the number of employees needed to do the required tasks within a certain length of time.

The Lunch Program

In order to staff an operation, you must first know the necessary tasks and how much time is required to perform each of them.

(A) Begin plans by considering the length of the serving time, usually called the "critical time" because this is when most employees are needed. Does the menu allow for a choice of food items? How many meals are served? These factors will affect the number of employees needed to serve the meal.

During the "critical time," along with servers, you will need a cashier and someone to replenish the serving line. Depending on the size of the operation, the employee replenishing the line may also be able to do the minor food preparation required throughout the serving periods.

Finally, consider the dishwashing area during the serving time. In small operations, most of the trays and/or dishes can be stacked for washing at the end of the meal

period. A server can then be used in the dishwashing area after the meal. In order to best maximize labor hours during the serving time, enough dishware will be needed to feed all of the students.

(B) Once the number of people needed to serve the meal has been decided, examine the tasks to be performed before serving time. Plan time to have the serving line set up before serving begins. It is important for the food to look good when service begins. It is also very important to plan for maintaining an attractive line throughout the serving period.

For new operations, estimates of the time needed for preparation will need to be made. In food service operations that are revising the staffing plan, preparation time can be measured by actually timing the preparation of various menu items. Not all employees may need to come to work at the same time. Staggered starting times often utilize personnel most effectively.

(C) Finally, plan for the tasks to be performed after the serving time. How much "pre-preparation" is scheduled for the following day? Do you have a routine cleaning schedule? Plan remaining tasks needed to put the kitchen in order for the day.

Some points to remember when developing your staffing plan and schedule:

- In small operations, the manager is usually the only employee who needs to arrive more than 3 hours before serving begins.
- Part-time workers can often have their hours extended to cover clean-up time.
- The cook(s) should be used on the serving line during part of the serving period to

allow them to see how customers accept the food they have prepared.

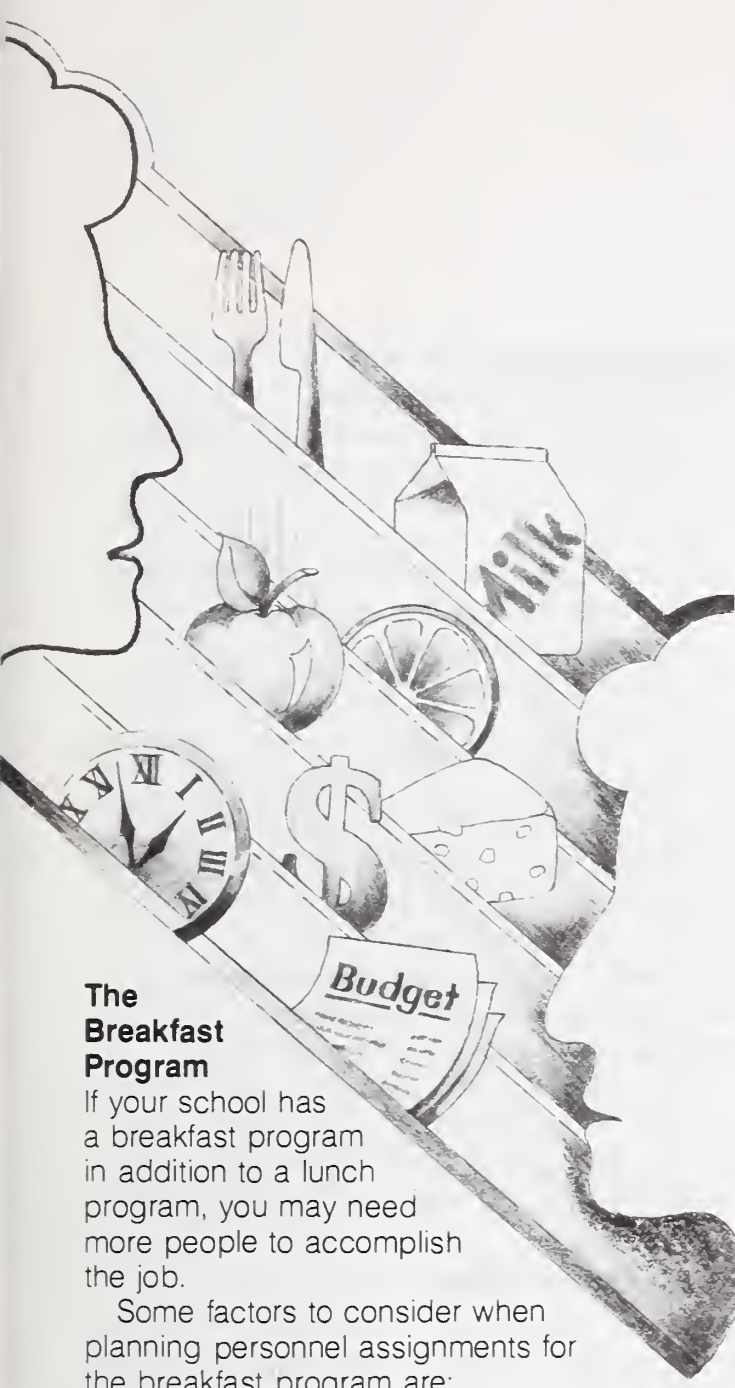
- Cook(s) should be responsible for cleaning up their work areas.
- Time must be planned for employees to have lunch and rest breaks.

In ideal situations the manager can be free to supervise and fill in as needed. It takes a substantial amount of time to plan menus, follow good purchasing procedures, train employees, maintain complete records, analyze the operation, be a resource person for the rest of the school, and perform the other tasks required to help a food service function effectively and efficiently.

When determining the number of workers needed, consider all available sources of manpower. Volunteer workers can make a real contribution to the food service operation. It is important that they be dependable and well organized workers. For maximum benefit to the food service operation, they must be available on scheduled days. Volunteers should not be involved in food preparation, but should have other meaningful duties. Detailed schedules, instructions, and training are necessary to have useful volunteer workers.

When student help is used, frequent rotation of work schedules will allow greater participation while having students miss as little classwork as possible. Students can often be most useful in tablesetting, serving, and clean-up operations.

Students may not be required to work as a condition for a free lunch. (Students eligible for free or reduced-price meals or milk should receive these benefits regardless of whether they work or not.) Students working in food service will need to follow the same health and sanitation procedures required for other food service employees. Well planned and detailed training programs are effective in developing good student-employees. Students who understand the basic requirements and purposes of the programs are motivated to perform well.



The Breakfast Program

If your school has a breakfast program in addition to a lunch program, you may need more people to accomplish the job.

Some factors to consider when planning personnel assignments for the breakfast program are:

- Lunch program personnel might have their hours staggered or extended to cover the breakfast service.
- Part-time workers may completely carry the load for a breakfast program.
- Preparation time needed for breakfast can be reduced by planning ahead and making use of lunch service employees in preparing for the following day's breakfast.
- Volunteers or paraprofessionals already available within the school might be used to help serve the food and make sure clean-up is done properly.

The Special Milk Program

When a school participates in the Special Milk Program, additional man-hours will not be needed to serve the milk. When milk is served at times other than mealtime, students or volunteers can perform the necessary tasks. However, some means of maintaining accurate records is essential.

Hiring Employees

Once the number of workers needed to operate the food service has been decided, it is time to begin hiring to fill the positions.

The simplest procedure is to have prospective employees use the same application form that is used for any prospective school employee. Applications should ask only for information relevant to the job to be filled. Application forms then become a permanent part of the employee's file. It is important that Federal and State labor laws be considered when developing application forms.

Qualifications

Each applicant being considered for a position should be interviewed personally. Though the administrator may hire all employees, the manager should always have the opportunity to interview applicants and make recommendations. References should always be checked.

When weighing an applicant's qualification, there are a number of factors to consider:

- **PHYSICAL HEALTH.** Initial and periodic examinations are usually required for all

food service employees. Managers should be familiar with and follow all pertinent local and State laws. An annual blood test is recommended for each employee. Other preventive measures required by some health departments and school systems include an annual chest x-ray or "time test" and a stool specimen. Prospective employees should be aware of the long periods of standing, and lifting, that are a necessary part of jobs in kitchens. Health records of school food service employees should be on hand at all times.

- **MENTAL HEALTH.** Prospective employees should have the ability to relate well to other adults, as well as to students.
- **EDUCATION.** A high school education is desirable for all employees. However, it is not necessary. Consideration should be given to applicants with special training. Many handicapped individuals have special talents that can make them an asset to the organization.
- **EXPERIENCE.** The type and amount of experience needed varies with the duties to be performed. An important consideration is how well the person will fit into your operation.
- **PERSONAL CHARACTERISTICS.** Prospective employees should have an interest in young people; have an ability to communicate; be dependable, loyal, and patient; and be neat and clean.

Many retirees contribute greatly to the lunch programs and it meets their needs to remain productive.

Employee Benefits

Most of the employment benefits to food service employees are determined by school employment policy. It is the manager's responsibility to be familiar with all the employee benefits. In addition, the manager should be able to answer as many questions on employee benefits as possible.

Hours of Work. Work schedules should include the hours of work, lunch periods, and rest breaks.

Leave Policies. Annual leave and sick leave policies for food service personnel should be comparable to that for other school staff. Employees taking time off, regardless of reason, should understand when and who to notify concerning absences.

Salaries. Salary schedules should comply with existing laws and local labor requirements.

Other Benefits. The feeling of job security on the part of the employees is achieved, in part, by group insurance plans, retirement plans, social security, and workmen's compensation.

Job Description

Job descriptions are a written form of job content. Each job description breaks down the position to show work to be done. Job descriptions are not complex formulas. They are outlines of the responsibilities of each position. In writing a job description use simple words. Keep it brief. Each job description should answer the following questions:

What does the worker do?

Why does the worker do this job?

How does the worker do this job?

What skills are needed to perform this job?

Job descriptions for food service personnel are written by the manager, since the manager knows most about the needs of the food service department. Positions should be filled according to the duties that need to be

performed rather than developing the positions around the abilities and personalities of the people.

Ttraining

Beginning Orientation

Preservice training for new employees helps the food service program operate efficiently. Some schools hold a 1-week work session prior to the opening of the school year. At this time, food service personnel learn the role of food service in the school's organization and overall personnel responsibilities.

More extensive orientation can also cover:

- Preparation and service of the food.
- Care and use of the equipment.
- Good sanitation and safety practices in the kitchen.
- Attitudes toward food service and feeding students.

On-The-Job Training

On-the-job training is vital to the efficiency of the food service program. A well organized, thorough, written on-the-job training program should be developed. Learning-by-doing trains employees in the proper techniques and procedures. Lesson plans should be written to ensure that the essential details of the subject are completely covered. On-the-job training is a continual activity and is beneficial to every employee. Working with longtime employees in individual training sessions gives you the chance to teach new procedures and methods and also correct poor or incorrect techniques.

In-Service Training

In-service training helps keep personnel abreast of current developments and changes. It can also be used to review procedures such as sanitation or maintenance procedures. Meetings should be brief, well organized, and presented in a business-like manner.

Other Training Opportunities

USDA's Regional Offices and the State agencies plan and conduct workshops covering pertinent information on school food service. Colleges and universities, as well as vocational schools, offer courses on various aspects of food service. All employees should be encouraged to take part in some outside educational activities. Additional education benefits the school food service as well as the individual.

Resource materials for school food service personnel are available on loan from the Food and Nutrition Information and Educational Materials Center (FNIC) in the National Agricultural Library. Books, pamphlets, journal articles, films, filmstrips, slides, etc., are available to upgrade personal knowledge in any area of school food service management or to supplement materials for your nutrition education program. For additional information on procedures for borrowing materials and specific materials available, you may contact the FNIC at the following address:

Food and Nutrition Information and
Educational Materials Center
National Agricultural Library
Room 304
Beltsville, Maryland 20705

Employee Supervision

Employees need guidance in performing their jobs. Schedules should be planned for maximum utilization of the employee's time. It is the manager's responsibility to plan use of time rather than to just let things happen.

When an employee performs well he should be complimented. Knowing that a job is being

done well and that good performance is noticed helps build morale.

Discipline should be administered fairly. When it is necessary to discipline an employee, talk with him privately. Avoid embarrassing the employee in front of others as such behavior only destroys the employee's confidence and his respect for you as a supervisor. If you establish a reputation for being firm but fair it will be easier to deal with employee problems.

Evaluations

All employees should be evaluated periodically. Evaluations are most often done on a yearly basis, but may be done as often as you think necessary.

When conducting an evaluation:

- Show appreciation for an employee's accomplishments.
- Emphasize areas where performance has improved.
- Discuss areas of weakness and give suggestions for strengthening these areas.
- Discuss training needs and opportunities available.
- Give the employee a chance to ask questions and express any dissatisfaction.
- Open the door for future discussions in case any questions arise.

When evaluations are less than satisfactory, more frequent counseling should be given to help the employee with problem areas. Give specific suggestions on how the employee can improve performance. Be positive in your suggestions to help the employee. Sometimes additional training or a shift in responsibilities will help the employee's performance.

4 MENUS

Type A Lunch

The nutritional goal of a Type A school lunch is to furnish approximately one-third of the Recommended Daily Dietary Allowances (RDA) of the National Research Council of the National Academy of Sciences for students of various age groups.

Type A Requirements

Four food components put together in the amounts needed by 10- to 12-year olds form the Type A Pattern. This pattern is a tool for planning nutritionally adequate lunches for students of all ages. It can be easily adjusted for older or younger students. (See "A Menu Planning Guide for Type A School Lunches," PA-719.) By using the pattern carefully and taking into consideration the likes and dislikes of student customers, the menu planner can create a wide variety of menus students will eat and enjoy.

USDA regulations generally require that every Type A lunch contain the following food components in the amounts indicated:

Milk

One-half pint of fluid milk served as a beverage. This fluid milk may be whole, lowfat, or skim milk (flavored or unflavored) or cultured buttermilk which meets State and local standards for these types of milk. Nonfat dry milk and fluid milk used in food preparation provides extra nutrients but cannot be counted toward meeting the Type A milk requirement.

Meat and Meat Alternates

2 ounces (edible portion as served) of lean meat, poultry, fish, or cheese, or 1 egg, or 1/2 cup cooked dry beans or dry peas, or 4 tablespoons of peanut butter, or an equivalent of any combination of the above listed foods.

Check with your State agency or FNS Regional Office for information concerning newly authorized alternate foods.

REMEMBER: To be counted in meeting this requirement, these foods must be served in a main dish or in a main dish and one other menu item. Cooked dry beans or dry peas may be counted as a meat alternate or a vegetable, but not as both in the same lunch.

Vegetables and Fruits

Three-fourths cup serving of two or more vegetables or fruits. Full-strength vegetable or fruit juice may be counted to meet no more than 1/4 cup of this requirement.





REMEMBER: Cereal foods such as macaroni, spaghetti, noodles, rice and hominy are considered OTHER FOODS and do not meet the vegetable/fruit requirement.

Items such as fruit cocktail, peas and carrots, and combination salads are considered as a serving of only one vegetable or fruit.



As a result of legislation enacted October 7, 1975, senior high school students now have a latitude of choice within the Type A lunch pattern. Senior high school students must be offered all five food items contained within the four food components of the Type A lunch. However, such students can now choose any 3, 4, or 5 of the 5 required food items offered.

Five food items contained within the four food components of the Type A lunch are as follows:

Components	Food Items	Sample Type A Menu
 Milk	Milk	Milk
 Meat/Meat Alternate	Meat/Meat Alternate	Oven-Fried Chicken
 Vegetables and Fruits Two or more	Vegetables ¹	Mashed Potatoes
	Fruits ¹	Seasoned Green Beans
 Bread	Bread	Roll
¹ May be a combination of vegetables and fruits or two vegetables (as shown in menu) or two fruits		

It is recommended that:

- A vitamin A vegetable or fruit be served at least twice a week.
- A vitamin C vegetable or fruit be served several times a week.
- Several foods containing iron be served each day.

Bread

One slice of whole-grain or enriched bread; or a serving of other bread such as cornbread, biscuits, rolls, muffins, etc., made of whole-grain or enriched meal or flour. (Check "Menu Planning Guide for Type A School Lunches," PA-719, for a list of bread equivalents.)

OTHER FOODS

Add other foods that are not part of the lunch requirements as needed to complete lunches, to help improve acceptability, and to provide additional food energy and other nutrients.

It is recommended that:

- Overall fat content in the Type A lunch be kept at a moderate level.
- Iodized salt be used in preparing lunches.

Nutrient Contributions of the Type A Lunch

No one food contains all of the nutrients in the amounts needed by the human body.

Selecting from a variety of foods that together supply these nutrients is very important. When a Type A pattern is properly used, lunches will include foods which supply needed nutrients and energy.

Milk

Provides most of the calcium which is needed for bones and teeth. It also provides protein, riboflavin, vitamin D (if fortified), vitamin A, phosphorus, and other nutrients.

Meats and Meat Alternates

Provide protein needed for growth and repair of body tissues. They also provide iron, B-vitamins and other nutrients.

Vegetables and Fruits

Provide most of the vitamin A and vitamin C and some of the iron and other vitamins and minerals. Vitamin C is needed for healthy gums and body tissues, and to help the body resist infection. Vitamin A is needed for normal vision and healthy skin.

Enriched or Whole-Grain Bread

Provides some of the B-vitamins and minerals (especially iron) and calories.

Variety in Type A Planning

The components of the Type A lunch can be combined in a variety of ways to provide attractive meals for your students. You can serve a hot plate lunch where all components are served as one unit, or you might serve:

- A choice of two different hot lunches.
- Type A lunches built around sandwiches.
- A choice between a hot lunch and a cold plate.
- A Type A salad plate. (This is great for the dieters!)

- Several choices among main dishes, fruits, vegetables, desserts, and/or milk.
- Type A box lunches or bag lunches. (Students who like to eat in the student lounges or out on the school grounds can take this lunch with them; it also has the appeal of quick food service for the teenage crowd!)

It takes careful planning on your part, but it does not necessarily cost more to do these things. Develop detailed work plans so employees can see the even distribution of tasks when such changes occur.

A La Carte Meals

A la carte sales require special planning in order to guide your students toward good nutrition. Try to choose foods for a la carte that can contribute to students' nutritional needs.

When you serve a la carte, be sure to GIVE THE TYPE A LUNCH EQUAL BILLING.

- If students know that the food is good,
- If they know there is a variety,
- If they are familiar with the purpose of the Type A lunch, and
- If they are made aware of the price advantage that often goes with buying a Type A lunch,

It is much more likely that you will have good participation in the school lunch program.

But this doesn't happen automatically. First, you have to produce a top quality product and then you have to communicate the value of the program to your customers.

The School Breakfast

The three components of the School Breakfast Pattern (milk, fruits or vegetables and bread or cereal) are meant to provide students with a good start toward meeting their daily nutritional needs. The kinds and amounts of foods in this

pattern are based on nutritional needs for 10- to 12-year old boys and girls. However, the amounts of foods served may be easily adjusted to meet the needs of older or younger students.

USDA regulations require that every school breakfast contain the following as a minimum:

Milk

One-half pint of fluid milk served as a beverage or on cereal or used in part for each purpose. This fluid milk may be whole, lowfat, or skim milk (flavored or unflavored) or cultured buttermilk.

Fruit or Juice

One-half cup serving of fruit or vegetable or combination, or $\frac{1}{2}$ cup full strength fruit or vegetable juice. Remember: Breakfast is an excellent time to serve a vitamin C food. (See "Menu Planning Guide for Type A School Lunches," PA-719, for sources of foods containing vitamin C.)

Bread or Cereal

One slice of whole-grain or enriched bread or an equivalent serving of cornbread, biscuits, rolls, muffins, etc., made of whole-grain or enriched meal or flour; or three-fourths cup (volume) or 1 ounce (weight), whichever is less, of whole-grain cereal or enriched or fortified cereal, or an equivalent quantity of any combination of any of these foods.

Bread equivalents are described in the "Menu Planning Guide for Type A School Lunches," PA-719.

To improve the nutrition of participating

students, breakfasts should also include as often as possible:

1 egg, or
1 ounce serving (edible portion as served) of meat, poultry, or fish, or
1 ounce cheese, or
2 tablespoons of peanut butter, or
an equivalent quantity of any combination of any of these foods.

ADDITIONAL FOODS

Butter and spreads such as jelly may be served with breakfasts. They add a great deal to the attractiveness of the meal.

5 OPERATIONS

Menu Planning

The goal of every school food service program is to serve nutritionally adequate, attractive, and moderately priced lunches that the customers will select.

The basic tool for achieving this goal is the use of carefully planned menus. The menu determines the foods to be purchased, the equipment, storage space, and personnel needed, and the work schedules required. Menu planning presents many challenges to the manager. Menus should be planned to:

- Provide the best possible lunches at the minimum cost.
- Produce optimum quality meals through effective management of available equipment and facilities.
- Achieve effective use of school food service personnel.
- Help students learn to eat well and accept a wide variety of foods.

The Type A lunch requirements form a simple, easy-to-follow pattern which shows the kinds and amounts of food students need at noon. The quality of the lunch depends on your knowledge, ability, and judgment in using the pattern to plan food combinations that will be acceptable to students.

For best results, plan your meals to:

- Include a variety of foods each day.
- Include different forms of foods prepared in different ways.
- Include food combinations most acceptable to students.
- Include foods for contrast in texture, flavor, color, size, shape.
- Consider special occasions, climate, or season, availability of foods and regional or cultural food habits.
- Take into account the facilities, equipment, and employees available and the time allowed.
- Keep within the food budget.

Purchasing

After the menus are planned, the next step is to purchase the food. The food buyer, in many cases the school food service manager, must purchase the food and supplies in the quantity and quality required by the menu and within the budget limitations.

WHAT TO BUY. The menu will tell you the type and quality of foods needed. Buy according to specifications developed for your operation's needs to get the best quality for the intended use. (To obtain a listing of sample specifications and standards for foods, request Agricultural Handbook No. 341 from Agricultural Marketing Service, U.S. Department of Agriculture, Washington, D.C. 20250.)

HOW MUCH TO BUY. The menus, along with previous participation data, will help you to determine kinds and amounts of foods needed. The "Food Buying Guide for Type A School Lunches," PA-270, provides information for planning and figuring the quantities of foods to be purchased and used when serving Type A lunches in the National School Lunch Program.

Keep in mind storage space, labor, and equipment available as well as USDA-donated foods. Always be aware of budget limitations.

WHEN TO BUY. Be aware of the availability of foods and seasonal fluctuation of prices.

Careful planning of food purchases insures the delivery and receipt of the right foods at the right time.

Develop a schedule for ordering. Set aside a regular time to see vendors and place orders.

This will save you time. By following a schedule, ordering becomes the thoroughly planned process that it deserves to be. Ordering on a planned schedule will help

eliminate forgetting to order foods and costly extra deliveries.

WHERE TO BUY. Choose local vendors that give the best quality, price, and service. Check with your school district for their purchasing policies.

Sources of supply could be wholesalers, institutional suppliers, sales representatives of food and supply manufacturers, jobbers, brokers, or cooperatives. Check your sources of supply for kinds of foods available from each, minimum and maximum order each will accept, credit policy, and delivery policy and schedule.

THINGS TO REMEMBER

- Always abide by a strict code of business ethics in purchasing foods.
- Never become obligated to any vendor. Do not accept gifts and beware of hard-sell tactics.
- Be courteous and fair at all times.
- Conduct business in private and by appointment.
- Do not discuss one vendor's prices and information with another vendor.
- Compare not only price and quality of merchandise offered but also dependability of the vendors and the service provided.
- Know the Type A pattern and use the "Food Buying Guide for Type A School Lunches," PA-270, for determining types and amounts of foods to be purchased. For specifications of new foods check with the State agency or FNS Regional Office. Food alternate regulations define some new foods for use in the programs.

Controlling Food Costs

Food expenditures are a major part of the total cost of school food service. The following are considerations important in controlling food expenses.

- Plan menus in advance, preferably using a cycle of 2 or more weeks.
- Precost each menu and adjust menus to meet the food budget.
- Use standardized recipes (see "Quantity Recipes for Type A School Lunches," PA-631).
- Standardize and control portion sizes.
- Use USDA-donated foods to a maximum extent.
- Establish a systematic method of purchasing foods using specifications developed for your food service needs.
- Evaluate the cost of using convenience foods against time and labor savings, reduced preparation losses, and storage and equipment savings. Convenience foods may include canned, dried, or frozen foods, baking mixes, partially cooked or fully cooked individual menu items or whole meals already plated.
- Consider the possibility of using one of the new food alternates which are authorized for use in child nutrition programs to help menu planners maintain nutritionally adequate meals within limited budgets.
- Plan as closely as possible the number of servings needed to avoid left-overs and shortages that require fast, additional food preparation.
- Use good food preparation techniques to avoid unnecessary waste.

Receiving and Storage

Use an inventory system to keep accurate records of food used and foods actually in stock. All foods and supplies should be checked by a responsible person when

delivered to be sure quantity and quality meet specifications of the item ordered:

- Check for net weight, count, number of cases, size of cans, and proper grade.
- Check for freshness of foods and frozen foods that are still frozen solid.
- Check for damaged or unsatisfactory items and have procedures for notifying vendor.

Fresh and frozen food items are perishable and must receive proper handling in transit and storage to reduce risk to the health of those who prepare and eat the foods. Delivery areas must be kept as clean as possible. Food items exposed to weather decrease in quality and increase chances of spoilage. Daily checks of dry, freezer, and refrigerated spaces are essential. Mold and decay go hand in hand with poor housekeeping. Floors and ceilings should be cleaned and sanitized regularly. Refrigerator and freezer spaces

should be cleaned and defrosted when stocks are low.

Fundamental requirements to consider when arranging for storage are air circulation, temperature, and humidity. These factors must be controlled to ensure a continuing sanitary environment for stored foods. PA-403, "Food Storage Guide for Schools and Institutions," gives further information concerning food storage.

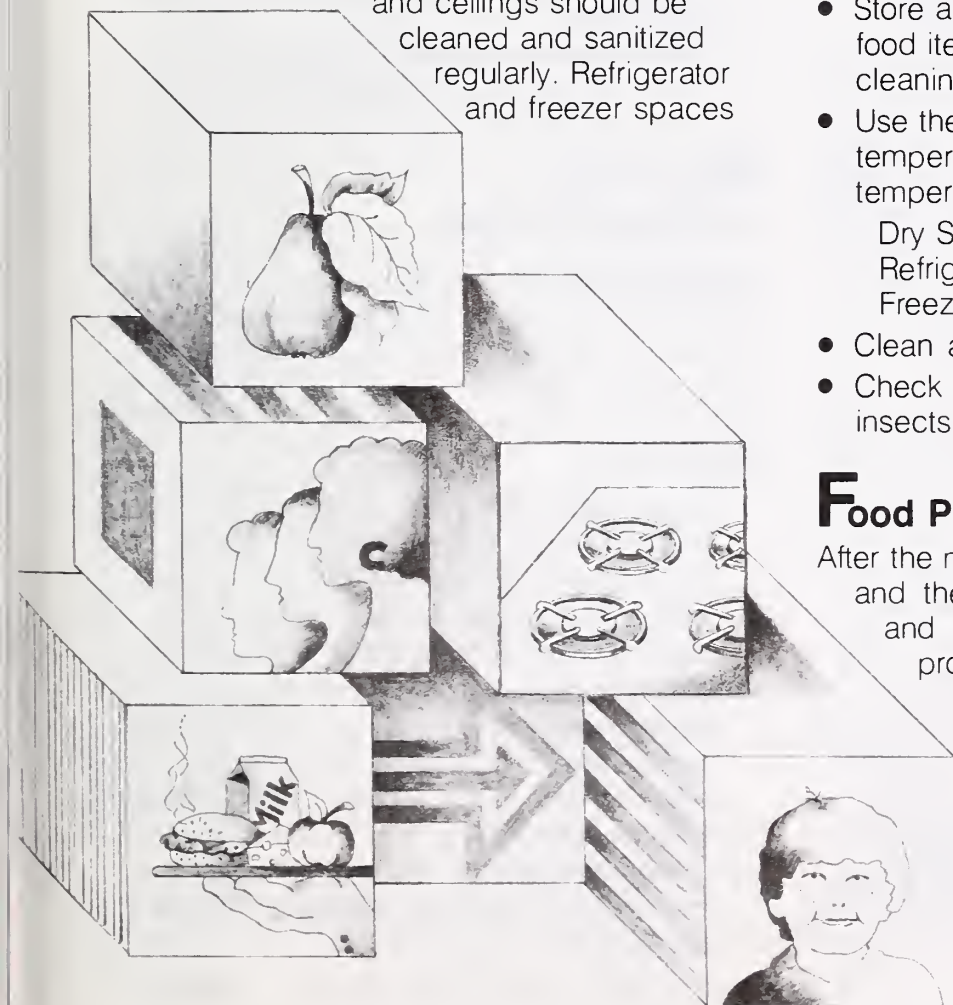
THINGS TO REMEMBER

- Storerooms should be adequate in size and conveniently located near receiving area and food preparation area.
- Storerooms should be clean, well-lighted, and well ventilated.
- Food and supplies should be stored off the floor, on shelves or pallets.
- Store all nonfood items separately from food items. Never store detergents and cleaning supplies near foods.
- Use thermometers to check storage temperatures. Proper and safe temperatures should be:
 - Dry Storage ----- 50°—70°F
 - Refrigerated Storage 36°—40°F
 - Freezer Storage ----- 0°—Minus 10°F
- Clean all storage areas on a regular basis.
- Check all storage areas for rodents, insects, and spoiled food regularly.

Food Preparation

After the menus have been carefully planned and the foods have been purchased and properly stored, the next step is the proper preparation of quality foods.

Quality foods are those which look good, taste good, provide optimum nutrients and are



safe. A working knowledge of the art and science of quantity cookery helps school food service personnel prepare foods that are appealing to the students.

Use Standardized Recipes

A standardized recipe controls production. By using the amounts of ingredients and the method of combination given in the recipe, a product of consistent quality will be produced. Yields can be accurately predicted. This will allow for accurate recipe costing and budgeting as well as economical food purchasing. Each recipe should be tested for acceptability before it is added to your recipe file.

Standardized recipes help reduce human failures and require less supervision to prepare. Instructions should be complete and procedures easy to follow. Employees with less training can produce a good quality product and more than one person can use a recipe with predicted results. Standardized recipes, however, will not replace the need for training or supervision; they just make it easier.

Standardized quantity recipes are available from many sources, including the Federal Government, State agencies, industry, trade and professional magazines, and reliable cookbooks.

- From Federal agencies—
"Quantity Recipes for Type A School Lunches," PA-631, U.S. Department of Agriculture, Food and Nutrition Service, 1971.
"Quantity Recipes for Child Care Centers," FNS-86, U.S. Department of Agriculture, Food and Nutrition Service, 1973.
"Fish and Shellfish Buying Guide and Quantity Recipes for Type A School Lunches," Series No. 5, U.S. Department of Commerce, 1967.
- Industry distributes standardized recipes providing a given number of servings of

definite quantity. Evaluations to determine their contribution to the Type A lunch requirements should be made before incorporating them into your collection of standardized recipes.

- Reliable quantity cookbooks used as textbooks or guides provide menus and information for buying, cooking, and serving foods to various types and sizes of groups. Evaluations to determine the contribution of their menus to the Type A lunch should be made.

For good results from standardized recipes:

- Read the entire recipe carefully and follow directions exactly.
- Adjust the size of recipe to provide the number of servings needed.
- Ingredients must be weighed or measured accurately.
- Portion control must be used so recipe will yield the proper number of servings.

Preparation of Specific Foods

Cooking Meat or Poultry

Meats are usually the most expensive items on the menu. For this reason, they should be given special attention to save nutrients and to get the most for the food dollar.

REMEMBER:

- Cook meats and poultry at low to moderate temperatures. Cooking meats at higher temperatures increases shrinkage.
- Always use a meat thermometer. Excess cooking can dry the meat and toughen it.
- Thaw meats and poultry carefully in the refrigerator. Only meats in waterproof wraps can be safely thawed in cold water or under running water. Never refreeze thawed meat or poultry.
- Use dry heat methods such as baking or broiling for tender cuts of meats and young poultry.
- Use moist heat methods such as stewing or

braising for less tender cuts of meat and older birds.

Cooking Fish and Meat Alternates

Fish and meat alternates are a means of offering variety in the meal. They can be easily overcooked; therefore, take care in preparing these items.

- Fish should be cooked at a moderate temperature. Properly cooked fish will flake easily and be moist.
- Thaw fish carefully in the refrigerator or under cold running water (if in waterproof wrap). Never thaw fish at room temperature or in warm water.
- Eggs should be cooked at *low* or *moderate* temperatures to avoid toughness and an unpleasant flavor.
- Eggs give added nutrition when used as an ingredient in recipes. Eggs can be used as a leavening agent in meringues and cakes, a thickening agent for custards and puddings, emulsions in mayonnaise, or a mixer to bind ingredients, such as meat loaf.
- Cook cheese dishes at low temperatures to avoid curdling, toughness, and stringiness.
- Soak dry beans and peas and then cook until tender.

Vegetables and Fruits

Careful preparation and service of vegetables and fruits will encourage better acceptance by student customers while retaining more of the nutrients. Since vegetables or fruits are not generally the dominant food in the meal, they should be selected to compliment the other foods with which they will be served.

Good preparation techniques result in vegetables that cook evenly and have a good appearance. Some general principles of vegetable cookery are listed.

- Cook vegetables in a small amount of water at a low temperature only until done. Do not overcook. Vegetables held on a steam table will continue cooking, so they can be

slightly under-done to insure a top quality product for the customer.

- Cook vegetables in the smallest feasible quantities. Stagger cooking times so that all students can be served freshly cooked vegetables. (This is called batch cooking.)
- Prepare vegetables as close to serving time as possible.
- Heat canned vegetables for only a short time. Heat and season before placing on the serving counter.
- Cook frozen vegetables without thawing.
- Season vegetables simply so flavors will not be concealed.
- Pare fresh vegetables carefully. Deep paring of fresh vegetables can cause large nutrient losses since many of the nutrients are concentrated just under the skin.

Vegetables can be served raw as finger foods or in salads. Raw vegetables and salad ingredients should be fresh, well-cleaned, and crisp. For salads, cut ingredients in bite-size pieces. Avoid overmixing salads. Add dressings just before serving time. Fresh, canned, dried or frozen fruits add variety to school meals. Serve fresh fruits in season. Fruits may be used as is (carefully washed), in salads, or in desserts such as cobblers, crisps, pies or puddings.

Bread and Cereal Products

Bread and cereal products contribute valuable nutrients, variety and taste appeal to school meals. School baked breads are a good way to use USDA-donated foods. Bread's can include yeast breads and rolls or quick-breads such as biscuits, muffins, and cornbread.

For best results:

- Use standardized recipes.
- Weigh or measure ingredients accurately.
- Check baking time and oven temperature carefully.

Other cereal products include items such as rice, macaroni, noodles, and spaghetti. Cook

these products according to package directions. Enriched rice should not be washed before it is cooked.

Desserts are not required in the Type A pattern, but are a desirable addition to the school lunch. Desserts should be nutritious as well as tasty and may include fruits, gelatins, puddings, cookies, cakes, and pies.

Scheduling

The food service manager must schedule both people and equipment. Schedules have to be realistic to be usable. You must schedule food service operations to:

- Fully utilize the employee's time, thus helping to control labor costs.
- Designate job responsibility. Employees' morale is better when they know what responsibilities they have in their job.
- Most effectively utilize equipment.
- Have the meal ready by serving time.
- Balance the workload.

Work schedules are best when planned at least a week at a time. On days when the menu is difficult, advance preparation may need to be planned. On days with easy menus, extra cleaning can be planned.

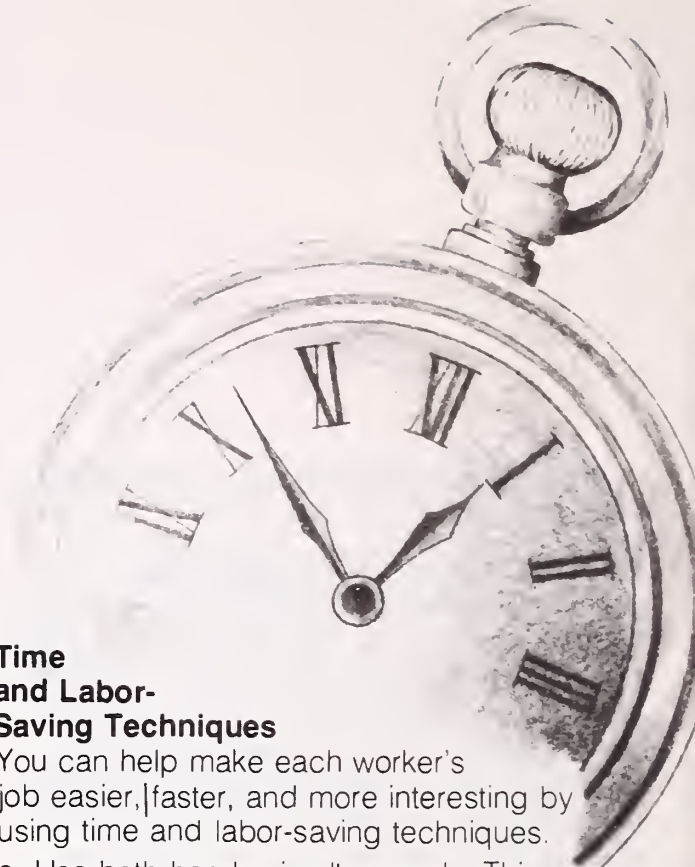
A daily work schedule will include:

- A list of all of the jobs to be accomplished in a time sequence for each employee.
- The amount of food to be prepared.
- The exact recipe to be used.
- Garnishes or other serving aids.
- The size of servings.
- The equipment to be used. This prevents overlapping its use and delaying productions.
- Lunch and break times for each employee.

Time and Labor-Saving Techniques

You can help make each worker's job easier, faster, and more interesting by using time and labor-saving techniques.

- Use both hands simultaneously. This increases rhythm and speeds up the job.
- Arrange supplies and equipment in the work area and serving lines at the center of most frequent use.
- Measure by weight rather than volume, if possible, as it is more accurate and faster.
- Maintain comfortable working positions, i.e., correct table heights.
- Always use the right tool for the job, i.e., french knife and board for cutting and dicing by hand.
- Use a dry vegetable brush for removing cheese and citrus rinds from a hand grater before washing.
- Take advantage of gravity whenever possible. With a single sweeping motion, scrape chopped foods across cutting table and allow to fall into the receiving pan held below the table.
- Foods such as celery, carrots, or string beans can be chopped in bunches, rather than singly.
- Use a portion scoop for filling muffin tins and for measuring sandwich fillings, hamburger patties, and cookie dough.
- Use labor-saving equipment such as slicers and choppers, whenever possible, to reduce hand work.
- Use equipment on wheels such as carts and wheel tables, to make transport easier.
- Measure dry ingredients before fats and



liquids to avoid unnecessary cleanup of measuring tools.

- Use cooking containers for serving whenever possible. The food will stay warm for a longer period and will look more attractive.
- Keep all knives sharpened.
- Put equipment and materials away clean and in their proper place.
- Follow the work schedule.

Along with making a work schedule for employees and stressing work simplification methods, your job can be made easier too.

- Prepare menus in advance according to the meal pattern.
- Plan to use standardized recipes.
- Maintain standard forms for records, requisitions, purchases, inventories, etc.
- Maintain a good filing system for all records.
- Keep records on equipment maintenance.
- Keep desk in good order.

Serving the Food

Serving the food is the final step between menu planning and actual consumption by the student. The appearance of the food and the way it is served contributes to the acceptance and enjoyment of the meal. The aim of the school food service personnel should be to:

- Serve foods attractively.
- Serve food quickly and neatly.
- Serve hot foods hot and cold foods cold.
- Serve standard portions of food that are appropriate for students. Be pleasant when serving the students.

To help personnel serving:

- Have all foods in place on the serving line before serving begins.
- Have plates, dishes, trays, etc., located for convenient, efficient serving.
- Use standard size spoons, ladles, and scoops for portion control.
- Have a sample plate for servers to check serving size and plate appearance.

- Keep the serving line well supplied.
- Have sufficient food ready before the time of serving.
- Sandwiches, cookies, cakes, pies, etc., which are sold separately, should be covered or wrapped.
- Use plastic gloves when serving breads, cookies, etc., by hand.

Sanitation

Sanitation and cleanliness in the food service operation is a must for protecting the health of your customers. Most food poisoning outbreaks are caused by failure of food service personnel to follow good sanitation practices. Each and every food service worker must take direct responsibility for following accepted practices of sanitation and cleanliness, but you, as manager, must take the lead. State, county, and city health authorities are available for guidance and training to assure that all laws and regulations are fully met. An inspection by local health authorities is generally made at least once a year. School food service operations, just as any food service operation, must adhere to the codes or ordinances of the local public health department having jurisdiction over the area in which the school is located.


To have an effective sanitation program you must initiate preventive control measures. Such measures will help to eliminate:

- Contamination of food by handlers.
- Infestation of food and facilities by insects and rodents.
- Spread of bacteria by unclean equipment.
- Food spoilage.

Safe Food Preparation and Service

Food can be safe to eat only when it is prepared and served in clean, sanitary facilities. Be sure you are taking these precautions:

- Never keep cooked meat at room



FOR FOOD SAFETY
KEEP HOT FOODS HOT
COLD FOODS COLD

°F **250**

240

Canning temperatures for low-acid vegetables, meat, and poultry in pressure canner.

212

Canning temperatures for fruits, tomatoes, and pickles in waterbath canner.

165

Cooking temperatures destroy most bacteria. Time required to kill bacteria decreases as temperature is increased.

140

Warming temperatures prevent growth but allow survival of some bacteria.

125

Some bacterial growth may occur. Many bacteria survive.

★ **60**

DANGER ZONE

Foods held more than 2 hours in this zone are subject to rapid growth of bacteria and the production of toxins by some bacteria.

40

Some growth of food poisoning bacteria may occur.

32

Cold temperatures permit slow growth of some bacteria that cause spoilage.

0

Freezing temperatures stop growth of bacteria, but may allow bacteria to survive. (Do not store food above 10°F for more than a few weeks.)

temperature for more than 2 hours after cooking.

- Keep hot foods above 140° F and cold foods below 40° F.
- Serve food on plates as students pass through the serving lines.
- Keep milk refrigerated until served.
- Store cooked foods that need refrigeration immediately, rather than cooling to room temperature before refrigerating.
- When storing large containers of liquid foods in the refrigerator, stir occasionally to cool faster. It is better to put such foods in smaller, shallow pans.

Cleaning and Sanitizing

It is equally important to keep your kitchen clean from both food particles and bacterial growth. The first may be accomplished by normal housekeeping practices. The second requires special procedures and the use of special chemicals to guarantee protection for you and your student customers. Check with local health officials for advice on what should be done to keep your food service operation both clean and sanitary. Follow a regular schedule of inspection yourself—perhaps once a week—to make sure the kitchen stays clean.

Equipment Sanitation

"Germs" gain entrance to food when it is in contact with unclean equipment. The bacteria involved may not always be the type that creates illness, but many do impart undesirable flavors and/or odors. Once again, destroying unseen bacteria is just as important as removing the visible soil.

Fewer repairs on the equipment will be needed if regular schedules of cleaning after use and daily cleaning are maintained. A few general rules of cleaning and sanitizing apply

to all equipment. Make the following part of your cleaning and sanitation program:

- Clean equipment internally as well as externally.
- Routinely take apart, wash, and sanitize removable equipment parts.
- Wipe up spilled food immediately.
- Clean equipment immediately after use. This will take less time, and make the job easier. If cleaning will be delayed, equipment such as steam kettles and mixing-machine bowls should be filled with water immediately to soak off hard-to-remove food.
- Equipment owner's manuals supplied by the manufacturer should be filed for easy reference. These manuals recommend how equipment is to be used and serviced and should be followed carefully.

Garbage and Trash Disposal

The following practices for disposing of garbage and trash are recommended:

- Garbage cans should be emptied daily. They should also be thoroughly cleaned, if they are not lined with paper or plastic liners.
- Garbage cans should be tightly covered and placed in a screened or closed ventilated area.

Many schools prefer to use incinerators and garbage disposals.

Dressing Rooms and Toilet Facilities

Clothing worn by employees while engaged in food service operations must be clean. Efforts at keeping your kitchen clean and sanitary are futile unless all employees entering the kitchen are wearing clean clothing.

For best protection, street clothes should never be worn in the kitchen. If at all possible, adequate clean facilities should be provided for food service personnel to change their clothing. If there are no facilities for changing clothes, all personnel should be encouraged

to start each work day with clean clothing. This means that time spent wearing work clothing before reporting to the job should be held to a minimum. The less work clothing is exposed to "street germs," the cleaner the food service will be.

Personal hygiene should also be stressed to all personnel. Because hands are probably the most common vehicle of contamination of food, the importance of effective handwashing cannot be overemphasized.

Conveniently located, clean toilet facilities meeting local health requirements should be accessible to personnel at all times. These areas should be adequately equipped with waste receptacles, toilet paper, and an approved hand-drying device or sufficient disposable towels. Soap or detergent supplies with hot and cold running water are a must for use by personnel.

Safety

Carefully organizing for safety reduces accidents. A safety conscious operation with well trained personnel results in a more pleasant atmosphere, more efficient work habits, and better food service.

Employees need to observe safety practices to prevent burns, cuts, sprains, electric shocks, bruises, and other injuries. Some assistance in training for the prevention of injuries can often be obtained from local fire departments, safety representatives of insurance companies, public utility companies, etc.

Safe Working Conditions

Safe working conditions must exist before operations themselves can be made safe. Conditions that underline safety include:

- Ample working space
- Suitable storage facilities
- Adequate lighting
- Good insulation
- Good housekeeping practices
- Proper enclosures and guards for machines
- Proper repair and care of floors
- Fire safety
- Safe clothing
- Compliance with ordinances, regulations, and codes
- First-aid kit

Equipment Safety

A good school food service safety program requires attention to the safe operation of equipment.

Clearly written instructions for the use of each piece of large equipment should be posted where they can be easily seen. It is recommended that these instructions be secured from the manufacturer if they are not already in your possession.

Equipment Safety Inspections

An initial inspection should be made immediately after the manufacturer installs the equipment.

Scheduled periodic inspections of equipment should be made by one or more of the following:

- (a) A representative of the manufacturer.
- (b) A representative of the local health department.
- (c) A representative of the local fire department.

The school administrator is responsible for seeing that inspections are made regularly, but he may need you to remind him. You, the food service manager, are responsible for seeing that each of your staff members follows instructions regarding equipment.

You and the administrator are also responsible for seeing that each member of the food service staff knows how to use first-aid and fire equipment. All school food service personnel should be given first-aid and fire instruction.

6 FINANCIAL MANAGEMENT

Operating a food service that serves good, nutritious meals is a challenge at best. But that is only a part of the challenge. There is the added responsibility of making school food service programs pay their own way.

USDA has increased emphasis on financial management as a means of improving the programs. For most school systems, this increased emphasis will require little change in financial procedures. (All schools participating in child nutrition programs are reimbursed on reported performance and documented costs.)

A good system of financial management will show how the programs stand, where weaknesses are, and what to expect in the future. Full costing will give the total cost per meal or per unit served. By gathering and using such accurate and comprehensive data, local, State and Federal governments can make sound, more meaningful policies assuring an equitable administration of the programs.

Food Costs

Good purchasing procedures are essential to ensure food quality and food cost control. Orders should be documented by purchase orders. The purchase orders can then be used to check vendors and to be sure the food ordered is received. Receiving records should be carefully maintained and checked to ensure receipt of goods before payments are made. Incoming invoices should be retained and used in computing the cost of the inventory. Documentation of the purchasing and receiving processes will help the food service manager control food costs and justify expenditures.

To find the real cost of a meal, it is essential to find the cost of "food used" during a given period of time. "Food used" refers to food that has been received and used in the preparation of meals served.

The first step in finding "food used" is taking an inventory. (It's a good idea to take an

inventory of all food at the beginning of the year.) A simple inventory form should give the food item and description, order unit size (pounds, size of cans, etc.), the quantity on hand, and the unit cost per item.

This same form can be used to inventory donated food items. An inventory needs to be taken at the end of each accounting period, i.e., each month. A good time to take this inventory is at the end of the day. Remember to count food items set out for meals to be prepared the following day.

Inventories need not be difficult or time consuming. Organize storage areas by food groups and then have food items managed in a well defined order. As new deliveries are received, they should replenish the stocks used. Food items will always be put in the same place in storage areas. Once the storage areas are in the most convenient order for your operation, a permanent listing of foods can be made. When taking the inventory, food items will then follow the same order as the inventory listing. This will save time in looking for foods and food items will not be missed. Remember to count cases that have not yet been put on the shelf.

When all food items have been listed and described, and the quantity on hand has been determined for each item, the cost of the inventory should be computed. First, check incoming invoices and determine the unit cost of each item listed on the inventory. The unit cost should then be multiplied by the quantity on hand to get the total inventory value for each item. Careful addition of the total

Sample Inventory Form					
School <u>HAWTHORNE ELEMENTARY</u> Month <u>OCTOBER 1977</u> Manager <u>RUTH JOHNSTON</u>					
Beginning Inventory <u>\$ 1249.81</u>					
Quantity on Hand	Unit	Item	Description	Unit Cost	Total Inventory Value
2 CASES	GALLON	MAYONNAISE	CONTAIN NOT LESS THAN 65% VEG. OIL	\$ 3.56/GAL.	\$ 28.48
20 CASES	NO. 10 CAN	PEACHES	YELLOW CLING HALVES US GRADE B (CHOICE) HEAVY SIRUP	\$2.26/CAN	\$ 271.20
38 CASES	NO. 10 CAN	TOMATOES	US GRADE B (EXTRA STANDARD)	\$ 1.83/CAN	\$ 417.24
Ending Inventory					

Format for Calculating the Cost of Food Used	
Total stock on hand at the beginning of the month (from last month's inventory)	\$ _____
Inventory Adjustment* (Add or subtract as needed)	\$ _____
ADD Food received during the month (from receiving reports)	\$ _____
GIVES Total food available for the month	\$ _____
MINUS Total stock on hand at the end of the month (from this month's inventory)	\$ _____
GIVES Total cost of food used during the month	\$ _____
* Inventory adjustments are needed to compensate for things like spoilage, mistakes in issuing, theft, etc.	

inventory values of all items will then yield the cost of the whole inventory.

The cost of the inventory will then be used in calculating the cost of food used.

Nonfood Supplies

If nonfood supplies are a small part of the purchases, they can be added as an expense in the month purchased. However, if supplies are purchased in quantity, they should be inventoried in the same way as food items to find the cost of supplies "used" during the month. The same basic form used to inventory food can be used for the inventory of supplies. Small equipment or expendable equipment (items under \$100 or a value designated by the State agency) are handled as supplies and should be counted as part of costs in the month purchased.

Labor Costs

Financial management requirements have little effect on the complexities of the payroll. Payroll requirements are set by IRS and Social Security legislation.

Labor costs are the salaries of the food service employees. For figuring costs to the food service, use the gross pay of the employees. Benefits paid by the school are referred to as associated employer's expenses and are a part of labor costs for the food service. The person figuring the school's payroll will be able to give you this information. Remember that payroll figures are confidential and should be handled carefully.

Equipment Costs

Large food service equipment or nonexpendable equipment is equipment that has a life expectancy of more than 1 year and at the time of purchase costs at least \$100

(this value may vary with each state agency). This equipment should be charged to the food service over a period of time.

By developing a depreciation schedule, a portion of the acquisition cost (purchase price plus related costs such as installation, taxes, etc.) is charged to the food service operation each month. The monthly depreciation rate is determined by totaling the acquisition cost of all nonexpendable equipment items being used and multiplying that total by a specific factor as provided in FNS(CN) Instruction 796-1, Rev. 1 or the corresponding policy as developed by the State agency.

Overhead Costs

School system overhead costs are a means of measuring the school system's financial support of the child nutrition programs. Overhead or indirect costs may include insurance rates, maintenance and operation of utilities, security, janitorial services, etc. The school system may recover some of these costs. However, the method of figuring overhead costs should be consistent throughout the school. All departments should know what their full costs are so the school can identify all costs.

The prices charged to paying students and for a la carte (including meals to adults) sales should include these overhead costs. It should be recognized that if overhead costs are not included in the charged price, the school is subsidizing that portion of the cost of the meal. Documentation of the overhead costs for small schools can be based on current records. In schools that have an average daily attendance of less than 300 and are not

associated with a larger school system, a factor of 10 percent of the direct costs may be used as the overhead cost. Allowable overhead costs have been well defined by the State agencies with guidance from USDA.

Once all costs have been determined, they then must be allocated or divided fairly among the child nutrition programs in the school. Formulas have been developed to distribute the costs to each program. These formulas are provided in FNS(CN) Instruction 796-1, Rev. 1 or in the corresponding policy developed by the State agency.

7 PROGRAM BUDGET AND ANALYSIS

Budget

School food service operations work within financial boundaries, as any operating business must, even a nonprofit business. The budget provides the necessary financial boundaries. It allows you to plan for balancing future income against future expenditures. You can also determine how you are operating by comparing actual costs and income to the budgeted costs and income.

In preparing a budget, begin with actual expenses, income, and participation information collected from the previous year. Adjust these figures for changes that have occurred during this school year. Finally, predict changes that you expect to occur in the coming year and make appropriate adjustments in the figures. Since the margin between income and expenditures is very small in a nonprofit program:

- **THE BUDGET MUST BE REALISTIC.** This also means that the budget must be evaluated periodically to determine its effectiveness. If actual costs differ from estimated expenses, the causes for these differences must be studied and action taken to correct the situation. Poor management practices do not justify a budget revision, they demand improvement.

- **RESOURCES MUST BE USED TO THE GREATEST ADVANTAGE.** Employees should be fully utilized. Purchases should be made to take advantage of special prices whenever possible. However, over-purchasing just to get a "good deal" may be more costly in the end. Paying bills on time can save you money.
- **EXPENDITURES MUST BE CONTROLLED.** Standard procedures should be observed by all personnel in receiving, reporting, and accounting for food as it is purchased and as it is used.

Records of expenditures of food and supplies purchased are essential in controlling costs and in future planning. Evaluating the past is part of planning for the future. Equipment purchases should be planned according to future needs.

Operations Analysis

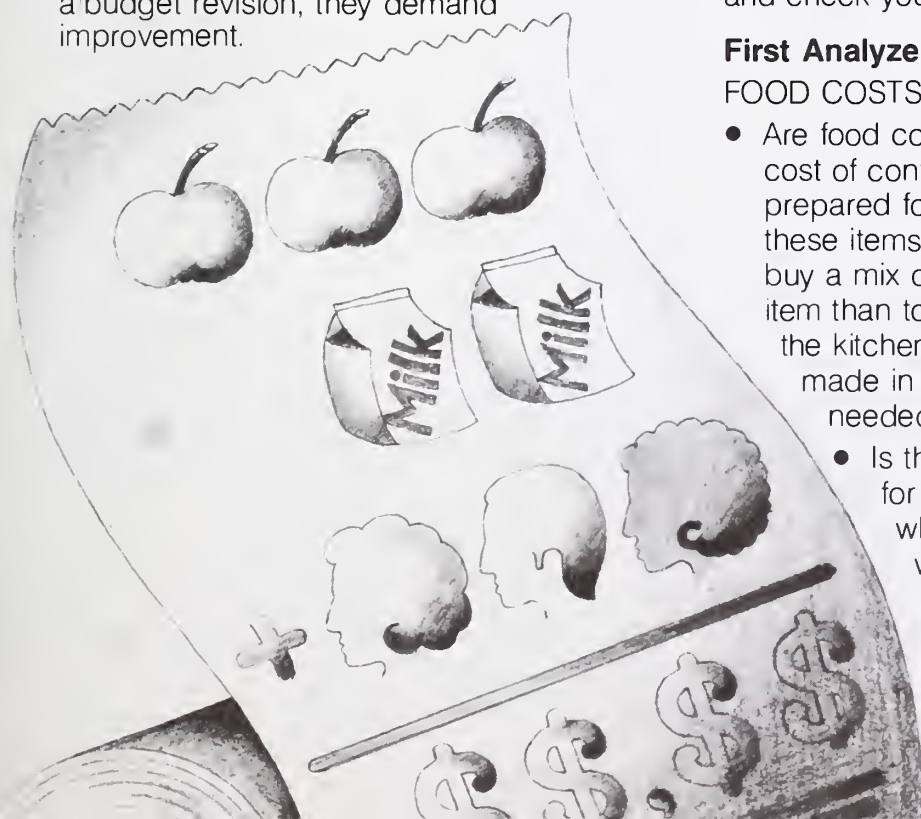
The total expenses of the food service for the month are compared to the total income (cash payments, State and Federal reimbursement, etc.) to tell how the programs are doing. Are you breaking even? Are you losing money?

Now that the costs and income are in black and white, it is time to analyze your operation and check your management.

First Analyze the Costs

FOOD COSTS:

- Are food costs reasonable? Determine the cost of convenience foods and kitchen prepared foods (remember labor costs for these items). It may be less expensive to buy a mix or even a pre-prepared food item than to have it made from scratch in the kitchen. Or perhaps the mix can be made in the kitchen and stored until needed, thus utilizing donated foods.
- Is the quality of the food item right for its intended use? For example, whole tomatoes are not necessary when making a stew that will cook down.



- Recipes should be sized to serve the quantities needed. Leftovers (unless they are planned for) are hard to use and, if wasted, make costs go up. Running out of food is also expensive as substitutions are usually more costly than the planned food on the menu. Standardized recipes give portion sizes for planning and serving.
- Are deliveries weighed to be sure orders are not shorted by the vendor. You may be paying for foods not actually received.
- Produce should all be of equal quality, i.e., good quality food throughout the crate.

LABOR COSTS:

- Has a standard been developed to evaluate the number of meals served per man-hour? Sick leave, annual leave, and other absences add to the labor cost. If these are high, find out why employees are off so much. Perhaps they need more training to increase their interest and morale. Or work simplification techniques may need to be taught to make the employee's job easier.
- Have work schedules really been well planned to use employees most efficiently?

EQUIPMENT COSTS:

- Is there equipment in the kitchen that is not being used? Using it just might save time or make an employee's job easier. Sometimes employees will not use equipment because of fear or lack of understanding. Give a demonstration and then plan for its use in the work schedule.

Now Look at Income

Is participation low? If so, find out the reasons. Does the food look and taste good?

Does the school need a public relations campaign for parents and teachers as well as for the students? Talk to the students and find out why they don't eat lunches. You are the manager and the expert in school food service. Explain the programs. Does everyone

realize that your menus must meet certain Federal requirements?

Have meals been priced fairly? Adults should pay, at least, the price paid by students plus Federal reimbursement, plus the cost of USDA-donated foods.

Are meals being served that are not being counted or paid for? Food for these meals plus the man-hours to prepare them and the indirect costs involved in them are expenses. As you can see, no meal is free.

Each area needs to be critically examined. Know how the money is spent and from where it is coming. Compare this month's expenditures and income with last month's financial data and with last year's corresponding time period. When there are significant changes in any area, know why.

For further information on child nutrition programs, contact the State educational agency in your State capital or write to:

CHILD NUTRITION DIVISION
FOOD AND NUTRITION SERVICE
U.S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C. 20250

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